



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D3504-3

Job Sheet 195258



Part No: D3504-3

Job Qty: 30 pcs

Part Name: Crossbolt Spacer



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 5/16/19

Job Tracking No:

Due Date: 9/6/19

Created By: Kimberley Guerin

Type: Stock

Description:

Note: DWG REV C IPP Rev:A New Issue 06-06-20 JLM IPP Rev:B Rev C dwg 07-12-06 DD verified by:EC

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
130	Purchasing	30 pcs	9/6/19	9/6/19	0.00	0.00	Purchasing - 1		
							Purchasing - 2		
							Purchasing - 3		
									SEP 12 2019
140	Packaging 2-1 - Receive - B4B	30 pcs	9/6/19	9/6/19	0.00	0.00	Packaging 2 - 1 - B4B		
							Packaging 2 - 2 - B4B		
							Packaging 2 - 3 - B4B		
							Packaging 2 - 5 - B4B		
							Packaging 2 - 4 - B4B		
							Packaging 2 - 6 - B4B		
							Packaging 2 - 7 - B4B		
							Packaging 2 - 8 - B4B		
							Packaging 2 - 9 - B4B		
							Packaging 2 - 10 - B4B		
							Packaging 2 - 11 - B4B		
							Packaging 2 - 12 - B4B		
							Packaging 2 - 13 - B4B		SEP 12 2019
							Packaging 2 - 14 - B4B		
							Packaging 2 - 15 - B4B		
							Packaging 2 - 16 - B4B		
							Packaging 2 - 17 - B4B		
							Packaging 2 - 18 - B4B		
							Packaging 2 - 19 - B4B		
							Packaging 2 - 20 - B4B		
							Packaging 2 - 21 - B4B		
							Packaging 2 - 22 - B4B		
							Packaging 2 - 23 - B4B		
							Packaging 2 - 24 - B4B		
							Packaging 2 - 25 - B4B		
							Packaging 2 - 26 - B4B		
							Packaging 2 - 27 - B4B		
							Packaging 2 - 28 - B4B		



Container No: S213140



Part: D3504-3

Job No: 195258

Serial No/Batch: S213140

Revision:

Inspector:

Exp Date:

Instructions: Various STC's

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 09/12/19

Plex 5/16/19 11:58 AM Dart.Guerin.Kimberley

					Packaging 2 - 29 - B4B	
					Packaging 2 - 30 - B4B	
					Packaging 2 - 31 - B4B	
					Packaging 2 - 32 - B4B	
					Packaging 2 - 33 - B4B	
					Packaging 2 - 34 - B4B	
					Packaging 2 - 35 - B4B	
					Packaging 2 - 36 - B4B	
150 QC 6	30 pcs	9/6/19	0.00 0.00		QC 6 - 9	
					QC 6 - 68	DAS
					QC 6 - 61	81
					QC 6 - 40	9-89
160 Packaging 3-1 - Stock - B4B	30 pcs	9/6/19	0.00 0.00		Packaging 3 - 1 - B4B	
					Packaging 3 - 2 - B4B	
					Packaging 3 - 3 - B4B	
					Packaging 3 - 4 - B4B	
					Packaging 3 - 5 - B4B	
					Packaging 3 - 6 - B4B	
					Packaging 3 - 7 - B4B	
					Packaging 3 - 8 - B4B	
					Packaging 3 - 9 - B4B	
					Packaging 3 - 10 - B4B	
					Packaging 3 - 11 - B4B	
					Packaging 3 - 12 - B4B	
					Packaging 3 - 13 - B4B	
					Packaging 3 - 14 - B4B	
					Packaging 3 - 15 - B4B	
					Packaging 3 - 16 - B4B	
					Packaging 3 - 17 - B4B	
					Packaging 3 - 18 - B4B	
					Packaging 3 - 19 - B4B	
					Packaging 3 - 20 - B4B	
					Packaging 3 - 21 - B4B	
					Packaging 3 - 22 - B4B	
					Packaging 3 - 23 - B4B	
					Packaging 3 - 24 - B4B	
					Packaging 3 - 25 - B4B	
					Packaging 3 - 26 - B4B	00
					Packaging 3 - 27 - B4B	
					Packaging 3 - 28 - B4B	
					Packaging 3 - 29 - B4B	
					Packaging 3 - 30 - B4B	
					Packaging 3 - 31 - B4B	
					Packaging 3 - 32 - B4B	
					Packaging 3 - 33 - B4B	
					Packaging 3 - 34 - B4B	
					Packaging 3 - 35 - B4B	
					Packaging 3 - 36 - B4B	
170 QC 21 - SA	30 pcs	9/6/19	0.00 0.00		QC 21 - SA - 21	DAS
					QC 21 - SA - 70	21
					QC 21 - SA - 53	9-89

SEP 17 2019

00

SEP 17 2019

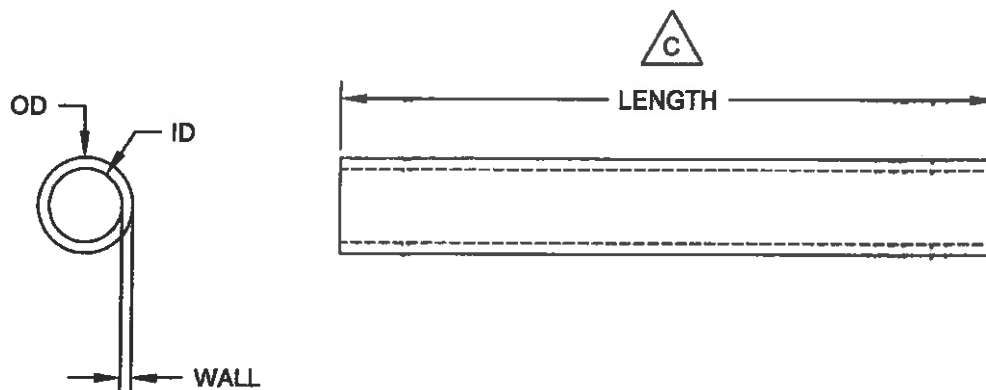
Part Op 130 - ISSUE P/O: _____ SUPPLIER: E.T.M. INDUSTRIES INC. MANUFACTURE AS PER DWG
 Descriptions: C OF C IS REQUIRED
 160 - (Identify as per dwg & Stock Location: _____), ***STOCK IN SKIDTUBE CELL*** LOCATION : LG001
 170 - QC21- Final Inspection - Work Order Release

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D3504-3P	Crossbolt Spacer	30 (1 ea)	130-Purchasing	5213136

Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
130-Purchasing	D3504-3P	30	0	0
Part Specifications				
Specifications could not be found.				

Plex 5/16/19 11:58 AM Dart.Guerin.Kimberley



D3504-1/-3/-5 CROSS BOLT SPACER PARTS LIST

PART NUMBER	OD	WALL	LENGTH +0.030 -0.000	ID	MATERIAL SPEC	NOTE
D3504-1	0.500	0.049	3.475	0.402 (REF)	M6061T6T0.500W.049	SEE NOTE 1a)
D3504-3	0.375	0.049	3.475	0.277 (REF)	M6061T6T0.375W.049	SEE NOTE 1a)
D3504-5	0.750	0.080 (REF)	3.400	0.590	M6061T6R0.750	SEE NOTE 1b)

D3504-1/-3/-5 CROSS BOLT SPACER:

- 1) MATERIAL: a) 6061-T6 OR 6061-T62 TUBING
 PER WW-T-700/6 OR AMS 4080 OR AMS 4082
 OR QQ-A-200/8 OR QQ-A-225/8
 (REF. DART SPEC. M6061T6TD.DDDW.TTT)
 b) 6061-T6 (OR 6061-T651/T6510/T6511/T62) ROUND BAR
 PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116) OR
 PER AMS-QQ-A-200/8 (OR AMS 4160)
 (REF. DART SPEC. M6061T6R0.750)
- 2) FINISH: NONE
 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 6) IDENTIFICATION: NONE
 7) WEIGHT: N/A

RELEASED
 07.11.16

C	ADD -5	DC	07.09.19
B	3.475 WAS 3.400	PH	06.11.01
A	NEW ISSUE	PH	06.04.21
REV.	DESCRIPTION	BY	DATE
DESIGN	PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	DC		
CHECKED	PH	DRAWING NO.	REV. C
MFG. APPR.	PH	D3504	SHEET 1 OF 1
APPROVED	PH	TITLE	SCALE
DE APPR.	PH	CROSS BOLT SPACER	NTS
DATE	07.09.19	COPYRIGHT © 2006 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **POHB043485**



REVISED

Supplier: ETM001-VC
E.T.M. Industries Inc.
310 Hall Avenue, Box 610
Renfrew
ON
K7V 4E7 Canada
Phone: 613-432-6136
Fax: 613-432-8212

PO No: POHB043485
PO Date: 5/16/19
Due Date: 9/6/19
Purchase Order Revision:
Revision Date:
Ship-To Contact: Guerin, Kimberley
Phone: 613-632-5200 Ext: 298
kguerin@dartaero.com

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pynt Terms: Net 30
Freight Terms:
Special Comments:

Items													
Line Item	Job	Part	Supplier Part No	Item No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	195251	D3490-5P			Crossbolt Spacer : as per Dwg D3490-5P RevA	Firmed	-	9/6/19	100 Ea	0 Ea	100 Ea	\$3.45/Ea	\$345.00
AUG 30 2019													
Line Item Note: Material WW-T-700/6 can be use													
2	195252	D4170-1P			Bushing : as per Dwg D4170-1P RevB	Firmed	-	9/6/19	100 Ea	0 Ea	100 Ea	\$4.50/Ea	\$450.00
AUG 30 2019													
3	195253	D2971P			Crossbolt Spacer : as per Dwg D2971 RevA1	Firmed	-	9/6/19	50 Ea	0 Ea	50 Ea	\$6.25/Ea	\$312.50
SEP 12 2019													
4	195256	D2973P			Crossbolt Spacer : as per Dwg D2973 RevA	Firmed	-	9/6/19	30 Ea	0 Ea	30 Ea	\$18.50/Ea	\$555.00
SEP 12 2019													
5	195257	D3504-1P			Crossbolt Spacer : as per Dwg D3504-1 RevC	Firmed	-	9/6/19	100 Ea	0 Ea	100 Ea	\$4.75/Ea	\$475.00
SEP 12 2019													



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB043485



Items													
Line Item	Job	Part	Supplier Part No	Item No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
6	195258	D3504-3P			Crossbolt Spacer : as per Dwg D3504-3 RevC	Firmed	-	9/6/19	30 Ea	0 Ea	30 Ea	\$12.50/Ea	\$375.00
						X30			SEP 12 2019				DP
7	195259	D3662-1P			Crossbolt Spacer : as per Dwg D3662-1 RevA	Firmed	-	9/6/19	100 Ea	0 Ea	100 Ea	\$4.65/Ea	\$465.00
8	195265	D5512-1P			Crossbolt Spacer : as per Dwg D5512-1 RevA	Firmed	-	9/6/19	100 Ea	0 Ea	100 Ea	\$4.00/Ea	\$400.00
9	195264	D3286-3P			Spacer : as per Dwg D3286-3 RevA	Firmed	-	8/23/19	45 Ea	0 Ea	45 Ea	\$11.00/Ea	\$495.00
						X45			AUG 22 2019				DP
10	199400	D3286-3P			Spacer : as per Dwg D3286-3 RevA	Firmed	-	9/6/19	5 Ea	0 Ea	5 Ea	\$11.00/Ea	\$55.00
Grand Total:												\$3,927.50	

Order Notes

Procurement Quality Clauses

A005 RIGHT OF ENTRY
A008 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION SENT TO DART AEROSPACE)
A012 CHEMICAL AND PHYSICAL TEST REPORTS
A016 PERSONNEL QUALIFICATION
A017 RAW MATERIAL IDENTIFICATION (AS APPLICABLE)
A026 CERTIFICATION OF MATERIAL CONFORMANCE
A041 QUALITY MANAGEMENT SYSTEM
A042 DART NOTIFICATION BY SUPPLIER
A043 RETENTION OF QUALITY DOCUMENT

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM

A049 SUPPLIER AWARENESS

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 8/22/19 8:54 AM Dart.Guerin.Kimberley

E.T.M. INDUSTRIES INC.
310 HALL AVENUE
BOX 610
RENFREW, ON K7V 4E7
Canada

Ph: 613-432-6136

Fax: 613-432-8212

Pack List

Number: 144017

Date: 05-Sep-19

To

DART AEROSPACE
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7
Canada

Ship To

DART AEROSPACE
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7
Canada

Ph: 613-632-5200

Fax: 613-632-5246

Ph: 613-632-5200

Fax: 613-632-5246

Terms		Ship Via	
Net 30 days			
Quantity	Description		
30 each	Part: D3504-3P CROSSBOLT SPACER SO: 25663 **LOT #107191	Rev: C	PO: POHB043485 Line: 006
CERTIFICATE OF COMPLIANCE "I hereby certify that the material described above is in conformance with applicable physical and dimensional specifications; that it was manufactured in accordance with applicable process specifications; and has been inspected to verify conformance to these specifications." APPROVED SIGNATORY (QUALITY ASSURANCE)			

RECEIVED
SEP 11 2019
DART AEROSPACE LTD.

1. Part Number D3504-3P	2. Part Name CROSSBOLT SPACER	3. Serial Number N/A	4. FAI Number N/A
5. Part Revision Level REV. C	6. Drawing Number D3504	7. Drawing Revision Level REV.C	8. Additional Changes N/A
9. Manufacturing Process Reference 107191	10. Organization Name ETM Industries Inc.	11. Supplier Code N/A	12. P.O. Number POHB043485, LN006
13. Detail FAI ☒	14. Full FAI ☒	<i>Baseline Part Number including Revision Level</i>	
Assembly FAI ☐	Partial FAI ☐		
Reason for Partial FAI: Not Applicable		N/A	
a) If above part number is a detail part only, go to Field 19 b) If above part number is an assembly, go to the "Index" section below.			
INDEX of part numbers or sub assembly numbers required to make the assembly noted above.			
15. Part Number	16. Part Name	17. Part Serial Number	18. FAI Report Number
N/A	N/A	N/A	N/A

1) Signature indicates that all characteristics are accounted for; meet drawing requirements or are properly documented for disposition.	
2) Also indicate if the FAI is complete per Section 5.4: ☒ FAI Complete ☐ FAI Not Complete	
19. Signature Mike Morin	20. Date 9/04/19
21. Reviewed by	22. Date
23. Customer Approval	24. Date

AS9102 Revision B First Article Inspection

Form 2: Product Accountability – Raw Material, Specifications and Special Process(es),
Functional Testing

1. Part Number D3504-3P	2. Part Name CROSSBOLT SPACER	3. Serial Number N/A			4. FAI Report Number N/A
5. Material or Process – Name	6. Specification Number	7. Code	8. Special Process Supplier Code	9. Customer Approval Verification (Yes/No/N/A)	10. Certificate of Conformance Number
MAKE FROM; ALUMINUM TUBING	ALUMINUM 6061-T6/T62 TUBING PER WW-T-700/6 OR AMS 4080/4082 OR QQ-A-200/8 OR QQ-A-225/8 (REF DART MATERIAL SPEC M6061T6T0.375W.049)	N/A	N/A	N/A	TW METALS: LOT#F002992750001
11. Functional Test Procedure Number	12. Acceptance report number, if applicable				
Not Applicable	Not Applicable				
13. Comments					
14. Prepared By Mike Morin			15. Date 9/04/19		

AS9102 Revision B First Article Inspection
Form 3: Characteristic Accountability, Verification and Compatibility Evaluation

1. Part Number D3504-3P		2. Part Name CROSSBOLT SPACER		3. Serial Number N/A		4. FAI Report N/A	
Characteristic Accountability				Inspection / Test Results			
5. Char. No.	6. Reference Location	7. Characteristic Designator	8. Requirement	9. Results	10. Designated Tooling	11. Non Conformance Number	14. Reference Documents
1	SHEET 1 of 1	N/A	ALUMINIUM 6061-T6/T62 TUBING PER WW-T-700/6 OR AMS 4080/4082 OR QQ-A-200/8 OR QQ-A-225/8 (REF DART MATERIAL SPEC M6061T6T0.375W.049)	ACCEPT	TW METALS: LOT#F002992750001	N/A	C of C # F002992750001
2	SHEET 1 of 1	N/A	TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED	ACCEPT	VERIFY	N/A	N/A
3	SHEET 1 of 1	N/A	BREAK SHARP EDGES: 0.005 TO 0.010 MAX	ACCEPT	VERIFY	N/A	N/A
4	SHEET 1 of 1	N/A	3.475 +0.030/-0.000	3.495	Height Gauge	N/A	N/A

The signature indicates that all characteristics are accounted for; meet drawing requirements or are properly documented for disposition.

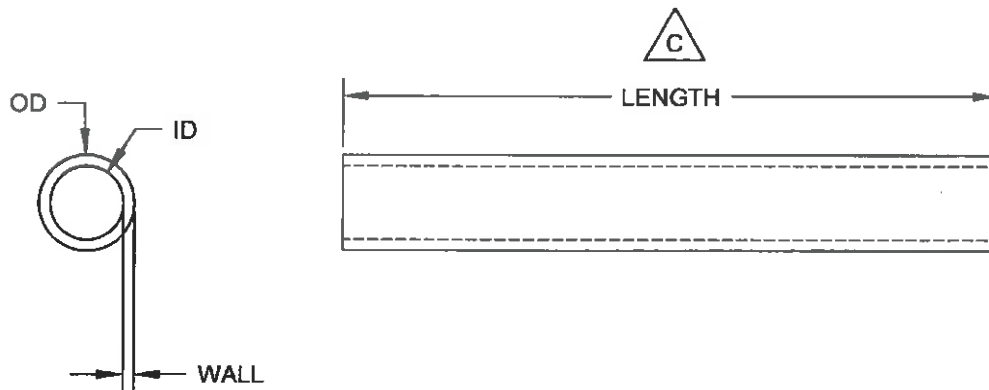
12. Prepared By

Mike Morin

13. Date

9/04/19

CONTROLLED COPY



D3504-1/-3/-5 CROSS BOLT SPACER PARTS LIST

PART NUMBER	OD	WALL	LENGTH +0.030 -0.000	ID	MATERIAL SPEC	NOTE
D3504-1	0.500	0.049	3.475	0.402 (REF)	M6061T6T0.500W.049	SEE NOTE 1a)
D3504-3	0.375	0.049	3.475 ④	0.277 (REF)	M6061T6T0.375W.049	SEE NOTE 1a)
D3504-5	0.750	0.080 (REF)	3.400	0.590	M6061T6R0.750	SEE NOTE 1b)



D3504-1/-3/-5 CROSS BOLT SPACER:

- ① 1) MATERIAL: a) 6061-T6 OR 6061-T62 TUBING
PER WW-T-700/6 OR AMS 4080 OR AMS 4082
OR QQ-A-200/8 OR QQ-A-225/8
(REF. DART SPEC. M6061T6TD.DDDW.TTT)
b) 6061-T6 (OR 6061-T651/T6510/T6511/T62) ROUND BAR
PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116) OR
PER AMS-QQ-A-200/8 (OR AMS 4160)
(REF. DART SPEC. M6061T6R0.750)
- 2) FINISH: NONE
- ② 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- ③ 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: N/A

RELEASED
07.11.16

C	ADD -5	DC	07.09.19
B	3.475 WAS 3.400	PH	06.11.01
A	NEW ISSUE	PH	06.04.21
REV.	DESCRIPTION	BY	DATE
DESIGN	PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	DC		
CHECKED	PH	DRAWING NO.	REV. C
MFG. APPR.	PH	D3504	SHEET 1 OF 1
APPROVED	PH	TITLE	SCALE
DE APPR.	PH	CROSS BOLT SPACER	NTS
DATE	07.09.19	COPYRIGHT © 2006 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



O'Neal High-Performance Metals Group



Packing Slip

ORDER NO.: 80018090

FROM: CHIC

PAGE 1

CUST NUMBER: 1203407 NET WGT: 257.891 REQ.DATE: 07/05/19 EARLY
SOLD TO: SHIP TO:
E.T.M. INDUSTRIES INC E.T.M. INDUSTRIES INC
310 HALL AVENUE 310 HALL AVENUE
BOX 610 ENUE RENFREW ONTARIO CANADA
RENFREW ON CANADA CN K7V 4E7
SALESPERSON: DEANNA PIMM
TERMS: NET 30 DAYS
F.O.B.: SHIPPING POINT
CUST ORD NO.: 114946
SHIP BY: 06/28/19
VIA: COMMON CARRIER
FREIGHT: PREPAID
RELEASE NO.:
RECEIVING PHONE: 613 432 6136

LINE	ITEM	DESCRIPTION	CLN#	ORD QTY	INVOICE QTY	SHIPPED QTY	WT	PCS
0001	41930	D6061-T6 3/8 OD X .049 WA	90	1.000 EA	1.000 EA	12.000 FT	.707	1

** 1 TEST REPORTS REQUIRED **
** 1 CERTS REQUIRED **

ECCN: EAR99 Export License: NLR Expiration Date: 0/00/00
PO:49399943 HT:F002992750001 PC: 1 CUSTOMER QTY: UOM
MLT:UNITED STATES MFG:UNITED STATES SLB/CL:228240

LINE	ITEM	DESCRIPTION	CLN#	ORD QTY	INVOICE QTY	SHIPPED QTY	WT	PCS
0002	41952	D6061-T6 3/8 OD X .058 WA	90	74.000 EA	74.000 EA	888.000 FT	60.206	74

** 1 TEST REPORTS REQUIRED **
** 1 CERTS REQUIRED **

ECCN: EAR99 Export License: NLR Expiration Date: 0/00/00
PO:49399774 HT:F002980400002 PC: 74 CUSTOMER QTY: UOM
MLT:UNITED STATES MFG:UNITED STATES SLB/CL:228138

LINE	ITEM	DESCRIPTION	CLN#	ORD QTY	INVOICE QTY	SHIPPED QTY	WT	PCS
0003	42252	D6061-T6 1/2 OD X .049 WA	90	3.000 EA	3.000 EA	36.000 FT	2.938	3

** 1 TEST REPORTS REQUIRED **
** 1 CERTS REQUIRED **

ECCN: EAR99 Export License: NLR Expiration Date: 0/00/00
PO:49399834 HT:F002936040002 PC: 3 CUSTOMER QTY: UOM
MLT:UNITED STATES MFG:UNITED STATES SLB/CL:228211

1 PO: 114946

THANK YOU FOR THIS ORDER

TERMS AND CONDITIONS APPLICABLE TO THE SALE OF THESE
PRODUCTS ARE SET FORTH ON OUR WEBSITE FOR YOUR CAREFUL
REVIEW.
<http://www.twmetals.com/invoice-terms.html>